

WHAT IS CLAIMED IS:

1. A key input device for a portable communication terminal having a printed circuit board provided in a body of the terminal, and a dome switch plate mounted on an upper surface of the printed circuit board, comprising:

5 one or more linear key arrays, each key array being provided with first and second key regions which are exposed to a user and connected to each other at a boundary portion between respective outer ends of the first and second key regions, said outer ends being mounted near an outer rim of the terminal body;

10 a plurality of dome switches formed on the dome switch plate under the linear key arrays, the dome switches being arranged, respectively, under the boundary portion between the first and second key regions of the respective key arrays, under the first key region of the respective key arrays near its outer end, and under the second key region of the respective key arrays near its outer end; and

15 one or more protrusions formed between a lower surface of the respective key arrays and the dome switch plate and between adjacent ones of the dome switches, thereby causing the first and second key regions to be biased upwardly or downwardly in a seesaw manner about a protrusion when the respective ends of the first and second key regions are pressed down by an external force.

20 2. The device as set forth in claim 1, wherein the boundary portion of the first and second key regions is formed with a groove defining a depth.

678-1238 (P11241)

3. The device as set forth in claim 1, wherein the key arrays are arranged such that their first and second key regions are arranged in a 2×4 array along a longitudinal direction of the body.

5 4. The device as set forth in claim 1, further comprising rectilinear support frames positioned, respectively, between the key arrays to separate the key arrays from one another.

10 5. The device as set forth in claim 1, wherein at least one of the respective key arrays is provided thereon with a printed surface, which is printed with various numerals and letters, for identification of functions of the respective key arrays, at positions corresponding to the boundary portion of the respective key arrays, and the outer end of the respective first and second key regions.

6. The device as set forth in claim 1, wherein the key arrays are made of a hard material.

15 7. The device as set forth in claim 1, wherein the first and second key regions are integrally connected to each other at the boundary portion.

20 8. A key input device for a portable communication terminal having a printed circuit board provided in a body of the terminal, a dome switch plate mounted on an upper surface of the printed circuit board, and one or more keys located above the dome switch plate, comprising:

678-1238 (P11241)

one or more linear key arrays, each key array being provided with first and second key regions, which are exposed to a user and connected to each other at a boundary portion between the first and second key regions, the first and second key regions being curved when their respective outer and inner ends are pressed down,
5 the respective outer ends of the first and second key regions being mounted near an outer rim of the body; and

dome switches formed on the dome switch plate under the linear key arrays, the dome switches being arranged under the boundary portion between the first and second key regions of the respective key arrays, under the first key region of the
10 respective key arrays near its outer end, and under the second key region of the respective key arrays near its outer end.

9. The device as set forth in claim 8, wherein the key arrays are made of a soft material.

15 10. The device as set forth in claim 8, wherein the first and second key regions are integrally connected to each other at the boundary portion.

11. A key input device for a portable communication terminal having a printed circuit board in a body of the terminal, comprising:

20 a plurality of linear key arrays, each key array having first and second key regions connect to each other at a boundary portion between respective outer ends of the first and second key regions, said outer ends being located near an outer rim of the terminal body; and

678-1238 (P11241)

a plurality of dome switches mounted on an upper surface of the printed circuit board, between the linear key arrays and the printed circuit board, a dome switch of the plurality of dome switches being positioned under each outer end and each boundary portion of each linear key array of the plurality of key arrays.

5

12. A key input device for a portable communication terminal comprising:
a printed circuit board;

a dome switch plate having a plurality of dome switches mounted on the printed circuit board; and

10

a plurality of linear key arrays positioned over the dome switch plate, each key array having first and second key regions connected to each other at a boundary portion and each having outer ends opposite the boundary portion;

wherein a dome switch is located under the boundary portion and each outer end of each linear key array.

15

13. A key input device for a portable communication terminal having a printed circuit board and a dome switch plate having a plurality of dome switches mounted on the printed circuit board, comprising:

a plurality of linear key arrays positioned over the dome switches, each
20 linear key array having first and second key regions connected at a central boundary portion,

wherein the ratio of first and second key regions to dome switches is 2 : 3.